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ABSTRACT

This study investigated whether classroom quality is related to child progress in meeting developmental milestones. The study used the "Assessment Profile for Early Childhood Programs: Research Version," a developmental checklist administered by teachers in a Head Start program. Findings indicated that pre-assessment and child age account for the majority of variability in child post-assessment scores, suggesting that teachers have a somewhat limited ability to influence child progress toward developmental milestones as measured by this type of assessment. The pre-assessment slope model suggests that factors beyond the pre-assessment alone are more likely to influence the developmental trajectory of children in smaller classrooms and those with younger children. Findings also indicated that a teacher who is able to tailor classroom activities to the unique needs of younger children may be more likely to facilitate those children's development toward the class average score. While the magnitude of the effect is small, these results show that high quality teachers can impact even the developmental trajectory of a child by recognizing individual needs. (JPH)

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The Influence of Teacher Individualizing Practices on Child Developmental Progress

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Abstract

A locally constructed developmental checklist, administered by teachers in a large southeastern Head Start program in suburban and rural areas, was used as an outcome measure to test the hypothesis that classroom quality is related to child progress in meeting developmental milestones. A two-level Hierarchical Linear Model was used to examine the influence of child level demographic characteristics and classroom quality on child progress. In the child model ($n=1,407$ children) pre-assessment and child's age were associated with child post-assessment scores. Three classroom models ($n=80$ classrooms) were estimated: 1) Class mean post-assessment score as outcome, 2) Pre-assessment-post-assessment slope as outcome, and 3) Age-post-assessment slope as outcome. The class mean pre-assessment was positively associated with the class mean post-assessment. For the pre-assessment-post-assessment slope as outcome model, class mean age and class size were both positively associated with pre-assessment-post-assessment slope. The Individualizing scale of the *Assessment Profile for Early Childhood Programs: Research Version* classroom quality measure was negatively associated with age-post-assessment slope, indicating that a teacher who is able to tailor classroom activities to the unique needs of children who are younger than their peers may be more likely to facilitate those children's development toward the class average score on a developmental checklist. While the magnitude of this effect is relatively small, it is worth noting that these results show that high quality teachers can impact even the developmental trajectory of a child by recognizing individual needs.

The Influence of Teacher Individualizing Practices on Child Developmental Progress

The quality of center based care has been an important and widely investigated issue for many years. The resulting body of literature has established relationships between classroom quality and child outcomes (Whitebrook, Howes, & Phillips, 1989; Harms, Cryer, & Clifford, 1990; Howes, Phillips, & Whitebrook, 1992). Children in high quality classrooms have been shown to yield higher scores on various outcomes than children in low quality classrooms (Phillips & Howes, 1987; Helburn, 1995). As the Head Start program continues to adjust to recent expansion and plans for future growth in the number of children served, extending the literature on the influences and correlates of quality in the Head Start population is critical to maintaining an effective program. The processes by which program quality initiatives translate into higher classroom quality and then into higher scores on child outcomes can be complex. To then investigate how these processes manifest themselves in Head Start programs involves ongoing assessment of program and classroom quality.

The Head Start Performance Standards (Subpart B, 1304.20, ACYF, 1998) require programs to obtain age and culturally appropriate screening measures for physical, emotional, and cognitive development. These standards encourage program staff to recognize that children bring individual differences to the classroom. These differences may take the form of different interests, learning styles, temperments, language and cultural backgrounds, and differing rates of development (ACYF, 1998). In meeting these standards, many programs use published child assessments and developmental checklists. These measures are frequently used to provide information about screening and as developmental assessments to document child progress. It is also common for a program to synthesize items from various sources into locally developed child assessment measures that correspond to the skills and competencies within the program's curriculum. Such measures can evolve over years of use as teachers give feedback to administrators regarding the utility of the information generated by the assessments. The purpose of this study was to explore the relationships between classroom quality and developmental milestones in the children.

Teachers who are successful at creating and maintaining rich, safe, and healthy classroom environments for young children will incorporate developmentally appropriate practices into their daily routine (Bredenkamp & Copple, 1997). Among these practices is an ability to recognize the unique needs of each child. Teachers can gather information about a child's interests, abilities, and behavioral tendencies in order to understand their unique needs through interacting with children individually on a frequent basis. These interactions then enable the teacher to tailor interventions and use motivational strategies that match the needs of each child. While individualized instruction is a fundamental aspect of special education, and identifying and implementing specific strategies for children with special needs in part distinguishes special education from the regular classroom environment (Cohen & Lynch, 1996), early childhood teachers face the challenge of adjusting classroom activities to children who present themselves at a variety of stages of development. In addition, special populations of young children including disabilities and non-English speakers are becoming an increasing proportion of the

Head Start population. Therefore, the ability to recognize individual differences in children, to plan individualized learning experiences, and to facilitate activities which meet the needs of each child are important to the success of the Head Start teacher.

The purpose of this effort was to investigate the hypothesis that classroom structure and quality are related to child progress in meeting developmental milestones. It was hypothesized that while the *Assessment Profile for Early Childhood Programs: Research Version* (Abbott-Shim & Sibley, 1992) measures a rich picture of classroom quality, including scales scores for Learning Environment, Scheduling, Curriculum, Interacting, and Individualizing, the Individualizing scale would be most related to the developmental checklist scores as it represents the ability of the teacher to recognize and respond to individual differences in children and to plan learning activities according to the unique developmental needs of each child.

Method

Subjects

The subjects for this study were obtained from a large, southeastern Head Start program that serves a 20 county area with a combined population of approximately 1.5 million people. The service area covers approximately 6,000 square miles of suburban and rural communities with a median county population density of 65 persons per square mile. Only 60% of the adults in the area have completed high school. Due to the lack of affordable housing, over 20% of the families in the area live in mobile homes. The median child poverty rate in the 20 counties is 16% while the median infant mortality rate is 11 deaths per 1,000 live births. The program is operated by a community action agency with seven delegate agencies including local school systems. The funded Head Start enrollment for the academic year during which this study took place was approximately 1,800 children in 90 classrooms at 31 sites. The nine month center based program offers full day classes, home based services, and provides comprehensive services to children and their families.

Measures

The *Assessment Profile for Early Childhood Programs: Research Version* was used to observe the quality of classroom teaching practices. The instrument is an observation checklist with dichotomous items and includes five sub-scales: Learning Environment, Scheduling, Curriculum, Interacting, and Individualizing. The Learning Environment scale assesses the richness of the classroom setting by examining the provision, accessibility, variety, and developmental appropriateness of space and materials that support learning experiences and child independence. Scheduling measures the planfulness of the teacher with respect to the type, balance, and variety of activities included in a typical day. The Curriculum factor assesses the teaching approaches that shape the direction of activity in the classroom encompassing both child directed and teacher directed learning strategies. The Interacting scale examines the extent to which teachers initiate positive interactions with children, are responsive to children, and positively manage children's behavior. The Individualizing scale examines the extent to which

the teacher can recognize and adapt to the unique and special needs of each child. The assessor looks for evidence that teachers address children's individualized learning experiences through assessment, planning, referrals, and communication with parents. The instrument yields item response theory (IRT) generated ability estimates for each factor which are rescaled relative to a national norm sample to be reported as standard scores with a mean of 50 and a standard deviation of 10 (Abbott-Shim, Sibley, & Neel, 1992). The classroom quality assessments were completed by trained observers who had passed both an initial reliability check following training and a second reliability check after completing approximately half of the observations. All raters achieved at least 90% agreement with experienced trainers.

Both content and criterion related validity have been demonstrated for the *Assessment Profile for Early Childhood Programs: Research Version* (Abbott-Shim, Sibley, & Neel, 1992). Content validity was documented through a review of the instrument by a wide range of early childhood professionals and a cross reference of the items with the Accreditation Criteria of the National Association for the Education of Young Children (NAEYC, 1984). Concurrent validity was established by examining the relationship of the *Assessment Profile for Early Childhood Programs: Research Version* to the *Early Childhood Environment Rating Scale* (Harms & Clifford, 1980). Validity studies have found significant correlations between the total scores of the two instruments of $r=.64$, $p<.01$ (Wilkes, 1989) and $r=.74$, $p<.01$ (Abbott-Shim, 1991). The reliability of the *Assessment Profile for Early Childhood Programs: Research Version* has been demonstrated for the five scales with Kuder-Richardson 20 and Spearman-Brown corrected split-half reliability coefficients ranging from .79 to .98 and .81 to .98 respectively. The IRT based reliability coefficients for the five scales range from .83 to .91.

The *Teacher Beliefs Scale* (Burt, 1991) assesses various aspects of teacher beliefs about developmentally appropriate practices and instructional activities. It is a teacher self-report measure derived from the NAEYC position paper on developmentally appropriate practice in programs for four and five year olds (Charlesworth, et al., 1991) and has been normed on 113 kindergarten teachers. It has been used previously in Head Start settings and with teachers of at risk children (Morelock & Mantzicopoulos, 1994; Mantzicopoulos & Neuharth-Pritchett, 1994). The scale was completed by both teachers and aides and yields appropriate and inappropriate scales for both beliefs and instructional activities. Only the inappropriate scales were used in this study as they tend to be less influenced by socially desirable responses and yielded more variability than did the appropriate scales.

A teacher administered, locally constructed, developmental checklist was used as the child outcome measure for this study. It consists of a 34 item teacher rating form designed to assess two year old competencies, a 38 item three year old form, a 45 item four year old form, and a 53 item five year old form. The instrument contains many items that correspond to skills assessed by the DIAL-R (get reference) screening measure and those items are indicated on the forms. The items are classified into three domains: conceptual, motor, and language development. Each item is scored yes or no indicating whether the child has demonstrated mastery of the skill. Scores are a total of items endorsed across all forms and can range from 0 to 170. While teachers are free to give credit to children for mastery of items on multiple forms, a

score of 34 roughly indicates mastery of the two year old skills and 72, 117, and 170 approximate mastery of all the three, four, and five year old competencies respectively.

Procedure

The developmental checklist described above was completed by teachers as a pre-assessment in the fall of 1996 and as post-assessment in the spring of 1997. The program requires all teachers to complete the checklists on all children during prescribed fall and spring time periods. The teachers kept paper records on each child and many entered the data into an electronic database at their center. A data collection supervisor employed by the researchers as a part of a larger study was housed full time on site in the central administrative offices of the program. He retrieved the databases from each center, collected the paper copies, and created a combined database that was then checked for consistency and accuracy of scoring and data entry. The preceding academic year was used as a pilot study in order to develop and perfect the data collection, scoring, and entry procedures. The data quality screening process identified ten of the 90 classrooms where the data was too incomplete to include. The remaining 80 classrooms had both fall and spring assessments as well as demographic information for each child who had remained in the program long enough to be given both assessments. Table 1 shows the structural characteristics and teacher attributes for the classrooms in the study while Table 2 reports the demographic characteristics of the children in those classrooms.

Table 1 About Here

Table 2 About Here

Research problems that involve nested, multi-level data structure are common in educational research. Educational researchers and evaluators are commonly asked to examine the relationships between variables that are measured at some or all of the following levels: child, family, classroom, school, district or system, county, and state. Hierarchical Linear Modeling (HLM) has become a useful tool to address such problems (Bryk & Raudenbush, 1987; 1988; Raudenbush, 1988; Arnold, 1992). A growing body of literature outlines the methodology for addressing such difficult analytical challenges (Bryk & Raudenbush, 1992) as well as a wide range of applications of these techniques (Raudenbush, 1988; Raudenbush & Bryk, 1986).

Head Start researchers are presented with some unique challenges that fall within this general class of issues. This study required an examination of the relationship between variables that are measured at the child level and other variables measured at the classroom level. A set of child level predictors were examined to evaluate their relationship to the developmental checklist post-assessment. The developmental checklist pre-assessment, child age, family income, mother's education level, household size, number of children in the household, number of adults

in the household, primary language, and gender were all entered into the initial child level model. Classroom level predictors tested included class size, adult-child ratio, mean age of children, the five scale scores of the *Assessment Profile for Early Childhood Programs: Research Version* and teacher and aide versions of the following variables: formal education level, specialized training (i.e. CDA and/or college degree), Inappropriate Beliefs, Inappropriate Activities, and years of teaching experience. Each of these classroom level quality indicators was used as possible predictors of the class average post-assessment score on the developmental checklist as well as in models that attempt to explain between class variation in the relationships between child level predictors and the child post-assessment score.

Results

The correlations between classroom level variables were examined. While computed primarily for descriptive familiarity with the data, several statistically significant relationships emerged. A matrix of this size, given the same sample size and alpha of .05 would yield eight significant correlation coefficients even if there were no population associations between the variables contained therein. The sample matrix for this study is reported in Table 3 and contains 11 statistically significant correlations. While it is likely that some of the correlations represent true relationships between the variables, it is difficult to know which may represent Type I errors. However, several of the correlations are worth noting. Class size was negatively associated with Interacting indicating that teachers may have a more difficult time maintaining positive and responsive interactions with all the children in larger classes. Teacher Inappropriate Beliefs was negatively associated with teacher education level suggesting that education may decrease the likelihood that a teacher holds beliefs that are not conducive to shaping the most positive environment for children. The Inappropriate Beliefs of the teacher were positively associated with the same beliefs in the aide suggesting that teachers and aides may influence each other and share beliefs. The mean age of the children in the classroom was positively associated with the Individualizing score suggesting that the teachers may find it easier to focus on the uniqueness of younger children when these children are encountered among older peers. Years of teaching experience was associated with Interacting for the teacher and may indicate that more experienced teachers are better able to interact with children.

Table 3 About Here

A two-level Hierarchical Linear Model with intercepts and slopes as outcomes was used to examine simultaneously the influence of child level demographic characteristics and classroom quality on child progress and is reported in Table 4. Level-one, the child-model ($n=1,407$ children), showed pre-assessment and child's age as significant predictors of post-assessment scores indicating that as the pre-assessment and the age of the child increase so does the post-assessment (% of variance accounted for = 69.1). For level-two, three classroom models ($n=80$ classrooms) were estimated: 1) Intercept or Class mean post-assessment score as outcome, 2) Pre-assessment slope as outcome, and 3) Age slope as outcome. For the Class mean post-

assessment model, only the class mean pre-assessment was a significant predictor reporting that as the class mean pre-assessment goes up, so does the class mean post-assessment (% of variance accounted for = 23.4). For the pre-assessment slope model, the class mean age and class size were both significant predictors. This implies that as class mean age and class size go up, so does the slope of the pre-assessment as predictor of the post-assessment. Therefore the pre-assessment, or where children started the year, more clearly predicts where they finish at the end of the year in classes that are larger and older (% of variance accounted for = 18.2). For the Age slope model, as the Individualizing scale goes up, the age slope goes down (% of variance accounted for = 2.9). The Individualizing scale of the *Assessment Profile for Early Childhood Programs: Research Version* classroom quality measure was negatively associated with age-post-assessment slope, indicating that a teacher who is able to tailor classroom activities to the unique needs of children who are younger than their peers may be more likely to pull those children up toward the class average score on a developmental checklist.

Table 4 About Here

Discussion

In interpreting the findings of this study, it is important to recognize the limitations of developmental checklists as measures of child progress. Teacher completed developmental checklists may include some lack of objectivity related to a teacher's tendency to generalize from overall impressions of the child to any specific ratings. In addition, specific positive or negative experiences with the child may lead the teacher to a type of halo or horns effect in which specific instances become so central in the teacher's thinking about the child that they influence both assessment and future interactions. It is also possible that some teachers may view the process of assessing children as a type of teacher performance evaluation and may be influenced by what they perceive to be the most socially desirable responses, that is those child assessment scores that will reflect most positively on their own job performance. While this study does not include as outcomes on all subjects any child assessments that were collected by independent observers, some children from some of these same classrooms were assessed, at the time of the post-assessment, in greater depth as part of another study (Lambert, Abbott-Shim, and McCarty, 1998). Randomly selected children were assessed by both teachers and assessors within randomly selected classrooms. As a validity check on the teacher administered checklist, the relationship between the child developmental assessments and the broader assessment battery was examined for those children who participated in both studies. Table 5 contains the correlations of the teacher assessments using the developmental checklist and the other measures that were collected by independent observers. These measures included: 1.) the Adaptive Social Behavior Inventory (ASBI) which measures the development of social skills (Hogan, Scott, & Bauer, 1992), 2.) the Boehm Test of Basic Concepts (Boehm, 1986) which addresses cognitive development, 3.) the M-Kids Preliteracy Inventory (Nurss, 1994) which assesses emerging literacy and print concept skills, and 4.) the Social Attitude scale from the Family and Child Experiences Survey (FACES) (ACYF, 1997).

All four scale scores from the ASBI indicate that prosocial behavior or social development is somewhat correlated with scores on the developmental checklist. There are some items within the developmental checklist that assess the social domain and therefore some degree of relationship would be expected. The relatively modest magnitude of these correlations may indicate that the teachers were not simply giving the most compliant and socially advanced children the highest ratings. The M-Kids Storytelling and How We Read scale show a small degree of association with the checklist scores as does the Boehm score, indicating that cognitive development is related to the checklist, even though the checklist contains items from many other domains. The M-Kids Why and What We Read scales were not related to the developmental checklist scores and may be more related to specific knowledge rather than global development. The Social Attitude scale was not related to the checklist scores and may offer further evidence that the teachers were not simply rewarding compliance in children with higher overall ratings.

Table 5 About Here

The program that provided the subjects for this study provides preservice and inservice training on the use of the developmental checklist used as the outcome variable in this study. In addition, the program uses other assessments that encourage teacher record keeping and portfolios on each child complete with samples of work and various data sources. Therefore, the overall process of assessment in this program may enhance the validity of the particular assessments presented herein. However, the assessment refers to simple yes/no, mastery/no mastery dichotomies that do not allow the teacher to record progress on a continuum from initial demonstration of specific skills to complete mastery. In addition, the measure includes items from various domains that all feed into a global score as opposed to domain-specific scale scores. However, one of the strengths of the measure is that while assessing global developmental progress it attempts to do so in a broad and comprehensive way.

The most valid assessments of young children will rely on multiple data sources, are broadly focused, are collected in a continuous rather than snap shot fashion, and are conducted in the context of naturally occurring activities (NAEYC & NAECS/SDE, 1991). The Early Childhood Assessments Resource Group of the National Education Goals Panel identified several purposes for the assessments of young children: 1.) Promotion of children's learning and development; 2.) Identification of children for health and special learning services; 3.) Monitoring trends and evaluation of programs and services; and 4.) Assessment of academic achievement in regard to individual student, teacher and school accountability (Shepard, Kagan & Wurtz, 1998). In this study the Head Start teachers' use of the developmental checklist addresses the first purpose. Communication with parents is another important purpose of assessment (Hill, 1993) which is implied in the Resource Groups' first purpose. The Individualizing scale of the *Assessment Profile for Early childhood Programs: Research Version* evaluates the systematic use of assessment for planning and guiding learning experiences, for identifying special needs, and for communicating with parents.

Keeping in mind the limitations mentioned above, these results show that the pre-assessment and child age account for the majority of the variability in child post-assessment scores. This suggests that teachers have a somewhat limited ability to influence child progress toward developmental milestones as measured by this type of assessment. This does not lead to the conclusion that teachers do not influence children, but that their influence may be felt in more specific domains rather than in terms of global development. Nevertheless, there was more variability in both the classroom age and pre-assessment slopes than would be expected by sampling error alone which justified exploration of the classroom structural and quality indicators that may help explain this variability.

The pre-assessment slope model suggests that factors beyond the pre-assessment alone are more likely to influence the developmental trajectory of children in smaller classrooms and those with younger children. [Both class size and mean child age were positively associated with class pre-assessment slope indicating that children are more likely to finish the year in a position relative to their peers that is similar to where they started the year in larger classrooms and those with older children.] The more the pre-assessment accounts for, presumably, the smaller the opportunity for factors such as classroom structure, instructional activities, and program quality to impact children. Therefore, these results point to the importance of smaller classes and earlier intervention. Smaller class size may also have an indirect effect on development through its influence on the teacher's enhanced ability to individualize instruction in smaller group sizes.

The Individualizing scale of the *Assessment Profile for Early Childhood Programs: Research Version* classroom quality measure was negatively associated with age-post-assessment slope, indicating that a teacher who is able to tailor classroom activities to the unique needs of children who are younger than their peers may be more likely to pull those children up toward the class average score on a developmental checklist. For example, a good teacher might be able to pull a relatively younger child up to the class average level of attaining development milestones by individualizing activities to the particular needs of the child. While the magnitude of this effect is relatively small, it is worth noting that these results show that high quality teachers can impact even the developmental trajectory of children by recognizing their individual needs.

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Table 1. Classroom Characteristics.

Variable	Mean	Median	SD
Class Size	17.59	18.00	2.98
Children Observed	16.49	17.00	2.20
Adults Observed	2.38	2.00	0.62
Ratio Observed	7.33	7.50	1.87
Class Mean Age at Post	4.03	4.13	0.31
Learning Environment	57.52	59.31	10.97
Scheduling	47.87	46.58	4.69
Curriculum	42.46	42.93	6.19
Interacting	52.74	53.71	6.02
Individualizing	54.26	54.55	3.40
Years of Teaching Experience			
Teacher	9.48	7.00	7.51
Aide	6.03	4.25	6.14
CDA or College Degree			
Teacher	90%		
Aide	80%		
Educational Level	<u>H.S.</u>	<u>Post H.S.</u>	<u>College</u>
Teacher	7.5%	75.0%	17.5%
Aide	29.1%	65.8%	5.1%

Note. Classroom n=80.

Table 2. Child Characteristics.

Variable	Mean	Median	SD
Pre-assessment	55.82	55	24.13
Post-assessment	99.83	96	38.59
Mother's Yrs. Ed.	11.66	12	2.14
Family Income	\$10,885.29	\$10,182.00	\$8,103.26
Household Size	3.93	4	2.03
Number of Children in Household	2.49	2	1.19
Age at Post-assessment	4.04	4.09	.47
First Language	<u>English</u> 82.3%	<u>Spanish</u> 16.3%	<u>Other</u> 1.4%
Ethnicity	<u>White</u> 50.2%	<u>Non-White</u> 49.8%	
Gender	<u>Male</u> 53.1%	<u>Female</u> 46.9%	

Note. Child n=1,407.

Table 3. Correlations Between Classroom Quality and Structural Indicators.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 ClsSize	---																	
2 Ratio	-10	---																
3 Mn Age	17	08	---															
4 Learn	-11	02	11	---														
5 Curr	-11	09	10	09	---													
6 Sched	-06	-06	-03	-01	21	---												
7 Inter	*-24	-05	-10	10	17	-09	---											
8 Individ	06	11	*27	-10	12	-03	13	---										
9 Educ-T	-15	07	-11	11	17	-02	04	-06	---									
10 Educ-A	-16	-15	13	10	-14	-07	16	14	-04	---								
11 InAct-T	08	02	08	04	02	-02	-08	06	06	-05	---							
12 InAct-A	07	-19	17	-15	-12	-04	-10	09	-06	12	18	---						
13 InBel-T	*25	-18	18	13	09	03	-16	14	*-22	02	*36	15	---					
14 InBel-A	17	-17	08	05	17	00	09	08	-06	13	01	*48	*28	---				
15 Exp-T	-11	01	13	12	17	-15	*30	-03	-01	02	02	02	14	21	---			
16 Exp-A	13	-08	-12	00	01	-09	06	11	01	-03	-11	-01	12	-02	06	---		
17 CDA-T	-12	12	12	12	17	-01	07	-08	*90	-08	05	-07	-20	03	03	-01	---	
18 CDA-A	*-25	01	02	02	-08	06	06	11	08	*66	02	01	-10	-08	03	-15	04	---

Key. ClsSize=Number of children in the classroom, Ratio-Adult child ratio, Mn Age=the average child age in the classroom, Learn, Curr, Sched, Inter, and Individ=the five scales of the *Assessment Profile for Early Childhood Programs: Research Version*, Educ-T, Educ-A=the education level for the teacher and aide, InAct-T, InAct-A=The Inappropriate Activities scale scores for the teacher and aide, InBel-T, InBel-A=The Inappropriate Beliefs scale scores for the teacher and aide, Exp-T, Exp-A=the years of teaching experience for the teacher and aide, and CDA-T, CDA-A=having a CDA or at least an associates degree for the teacher and aide.

*=p<.05.

Table 4. Estimated Effects of Child and Classroom Variables on Post-assessment Teacher Ratings.

Fixed Effect	Coefficients		se	t	p	
Class Mean Post-assessment						
Grand Mean	100.98	3.27	30.86	.000		
Class Mean Pre-assessment	0.99		0.14	7.31	.000	
Pre-assessment Slope						
Intercept	1.06	0.06	19.26	.000		
Class Size	0.04	0.02	2.19	.028		
Class Mean Age	0.40	0.15	2.67	.008		
Age Slope						
Intercept	2.63	1.16	2.27	.023		
Individualizing	-0.66		0.33	-1.98	.048	
Random Effect						
	Variance		df	χ^2	p	Reliability
Class Mean Post-assessment	849.59	78	9,960.45	.000	.992	
Pre-assessment Slope	0.18	77	394.25	.000	.716	
Age Slope	41.02	78	125.37	.001	.371	
Proportion of Variance Explained by Final Model						
Model	Class Mean Post-assmt. Variance	Pre-assmt. Slope Variance	Age Slope Variance	Child Level Random Effect		
Unconditional Model	1,109.43	0.22	42.25	387.12		
Conditional Model	849.59	0.18	41.02	119.69		
Percentage Explained	23.40	18.20	2.90	69.10		

Table 5. Correlations of Teacher Ratings Post-assessment Score with Other Measures.

Measure	r	n	p	Administered By
ASBI Comply Scale	.30	156	.00	Teacher
ASBI Disrupt Scale	-.30	156	.00	Teacher
ASBI Express Scale	.27	156	.00	Teacher
ASBI Prosocial Scale	.32	156	.00	Teacher
M-Kids Storytelling Scale	.19	141	.02	Assessor
M-Kids What Scale	-.02	141	.86	Assessor
M-Kids Why Scale	-.05	141	.54	Assessor
M-Kids How Scale	.26	141	.00	Assessor
Boehm Total Score	.29	151	.00	Assessor
Social Attitude	.04	146	.65	Assessor